6195, Spencer-Owen Comm Schools

PROJECT ABSTRACT

Today's students, surrounded by digital technology, are fundamentally different from previous generations (McHale, 2005). Unfortunately, today's students are being taught and assessed in the same way they have been for decades - based on the their ability to recall discrete facts rather than their ability to think critically and solve problems as a team. A widening gap has formed between the skills students are acquiring in schools and the skills needed to succeed in the global workplace (Partnership for 21st Century, 2005). Our project will begin to bridge that gap by using Web 2.0 technologies and the DOE Learning Connection portal to create interactive lessons to engage students and help them meet the technology standard of "using digital environments to work collaboratively and to contribute to the learning of others."

Spencer-Owen Community Schools (SOCS) will partner with Richland-Bean Blossom Community Schools (RBB) for their experience in delivering coursework via an online course management system (CMS). Two RBB Social Studies teachers currently conduct all lessons via Moodle. Students use laptops to complete daily online lessons with teachers serving as guides. These teachers will serve as expert teachers mentoring others as they develop online lessons. Throughout this project, current Moodle courses will be moved to the Learning Connection system allowing us to standardize on one CMS for sharing exemplary lessons between districts.

Our first goal is ALL Freshman students at Owen Valley High School and Edgewood High School will be empowered with 21st-century skills by actively participating in an engaging, technology-rich learning environment focused on student achievement. Because both districts have school improvement goals centered around reading and writing, we have selected English as our focus area. SOCS has three English teachers and RBB has four English teachers serving all 9th grade students at their respective high schools. Additionally, Owen Valley Middle School has four English teachers ready to develop online coursework. These 11 teachers (with technology implementation levels ranging from exploration to mechanical), are our core team for this project. This team has committed to actively use the Learning Connection to create multiple lessons. Students will actively participate in these lessons and be involved in cross-district collaborative communities working on common projects.

Our second goal is that all students will be more engaged in learning as teachers develop more technology-rich, interactive classrooms. Teachers will begin and end our project by taking the Levels of Technology Innovation (LoTi) survey to discover their level of technology integration. Based on survey results, teachers will set goals on what level they would like to be at by the end of our project. Teachers will be enrolled in the Learning Connection, will be trained on collaborating thru online communities and will have opportunity to attend bi-weekly trainings covering topic specific technology integration. Core teachers will begin creating their Learning Connection classes by attending a full-day session with Dr. Mark Jones and Dr. Larry Tinnerman, Professors of Curriculum, Instruction, and Media Technology at Indiana State University. Dr. Jones and Dr. Tinnerman will conduct 4 intensive one-day sessions during our project enabling an additional 60 teachers to begin developing Learning Connection classes.

Data will be collected throughout the project to document progress. The Leadership Team will meet quarterly to discuss progress and make adjustments as we monitor student outcomes. As we pursue these changes in classroom instruction, the Leadership Team will model our belief in the value of collaboration by actively sharing our experiences on the Learning Connection, providing site visit opportunities to interested schools, and supporting technology integration needs, as possible using local funds.

NEEDS/BASELINE

SOCS and RBB are below the state average on Spring ISTEP scores in both the areas of Language Arts and Math (see table). School improvement goals in both districts center around improving reading and writing skills.

Measure	SOCS	RBB
Free/Reduced Lunch %	40	30
ISTEP ¿ Lang Arts (Spring)	69.1	70.0
ISTEP ¿ Math (Spring)	66.4	68.2
Graduation Rate	73.6	84.2

Teachers are working diligently toward improving student achievement and are anxious to find new ways to improve instructional practices to engage students and help them become active learners. Both schools have seen positive results in student interest and engagement by simply delivering more multi-media rich lesson using powerpoints and online educational resources delivered via laptops and classroom projectors. Students, however, have already moved far beyond these basic technologies in their daily lives. They are far more interactive - communicating with friends via text messaging, creating personal content with Facebook, and posting personal videos with YouTube. Likewise, an 11/09 survey indicates that 76% of our teachers are personally comfortable with these technologies. Could these 21st century tools be leveraged in the classroom to actively engage students and improve student learning? Research indicates that computer technologies have a high impact on student learning when they engage students in authentic, complex tasks within collaborative learning contexts (Roschelle, 2000).

Although we know that students respond well, are more engaged and motivated, and stay on task when technology is integrated into our instruction, our survey indicates that only 22% of our teachers have used Web 2.0 tools with students in the classroom. We want students to be literate in today's knowledge-based digital age, yet we are not providing them the opportunities to do so. However, our

survey indicated that an astounding 84.8% are interested in learning to incorporate Web 2.0 tools into their instructional practices.

Our initial focus for using Web 2.0 tools in the classroom will be on the secondary schools specifically with the English classes at Owen Valley Middle School (243 students), Owen Valley High School (232) and Edgewood High School (226). Seven English teachers serve the entire 7th-9th grade classes at OVMS and OVHS, and four teachers serve the entire Freshman class at EHS. These teachers will serve as our core teacher team and will be the first to attend an intensive one-day professional development training. At this training, teachers will learn the basics of Web 2.0 tools and what tools are available, will create their classes using The Learning Connection, and will begin to develop online Learning Connection lessons.

A final gap discovered in our November survey was in the area of teacher collaboration. The September 2008 District Administration Magazine reported a growing body of evidence suggesting a positive relationship between teacher collaboration and student achivement. Unfortunately, national as well as local data indicate that many teachers still plan and teach alone. Our survey indicates that 45% of our teachers currently collaborate with other teachers within their own district on a daily or weekly basis. Unfortunately, only 8% of our teachers collaborate with teachers outside our district. Thru our project, over 30 teachers from each district will participate in regular collaboration with teachers from other districts through the Learning Connection communities.

GOALS/OBJECTIVES

Students leaving the SOCS and RBB school districts will be experienced using online tools to be successfully whether they enter the workplace or continue on to higher education. The Framework for 21st Century Learning (www.21stcenturyskills.org) documents that equipping students with 21st century skills (our student outcomes), is only possible with adequate teacher support systems and accountability. Therefore, our student outcome goals include objectives that provide support and training for teachers as a means of reaching those goals. Additionally, an ongoing embedded online professional learning community will be developed and supported using The Learning Connection, Web 2.0 tools and other interactive methods in order to foster continued growth of educators in the use of technology.

Goal 1: All SOCS and RBB Freshman students will demonstrate improved 21st century skills, specifically the National Education Technology Standards of increased interactive communication/collaboration, information literacy, effective use of real-world tools, and personal/social responsibility.

Objective 1a: All SOCS and RBB Freshman students will successfully complete a minimum of four online lessons delivered via the Learning Connection website.

Objective 1b: Seven English teachers from SOCS and four English teachers from RBB (Core Team) will attend professional development with Dr. Mark Jones and Dr. Larry Tinnerman, Professors of Curriculum, Instruction, and Media Technology at Indiana State University and participate in collaborative online discussions to implement Objective 1c.

Objective 1c: Core Team teachers will create a minimum of four Learning Connection lessons containing student activities that involve additional Web 2.0 tools such as WIKI's, blogs, shared documents, forums, and other internet resources.

Goal 2: All SOCS and RBB students will demonstrate increased engagement in classroom learning thru participation in technology-rich, interactive classrooms.

Objective 2a: Ninety percent of SOCS and RBB teachers will attend a minimum of 2 afterschool mini-tech trainings covering such areas as using digital cameras, engaging students thru multimedia, using powerpoint in daily instruction, using student input devices, using whiteboards, getting started with WIKI's, blogs, and other online collaboration tools, etc.

Objective 2b: Thirty teachers from each district will attend a full-day intensive training session with Dr. Jones and Dr. Tinnerman from ISU to further develop skills in using online tools and will create and deliver a minimum of two Learning Connection or Web 2.0 based lessons.

Objective 2c: Fifty percent of SOCS and RBB teachers will have moved up one level on the Level of Technology Innovation (LoTi) scale as measured on the LoTi survey.

Objective 2d: Building Administrators will use the LoTi Observer during classroom walk-thrus to provide feedback to teachers on their level of technology integration and will provide opportunities for collaboration with other teachers to discuss instructional practices.

METHODS/ACTIVITIES

Our project activities demonstrate our belief that more engaging, technology-rich, collaborative learning environments lead to increased student achievement. We know that all teachers are not ready to jump into a full online course curriculum, but our survey shows that 84.8% want to better integrate technology into their instruction. We will begin and end our project with teachers taking the Levels of Technology Innovation (LoTi) survey to help them understand where they are in the framework of integration and monitor their own growth.

All teachers will be enrolled in the DOE-sponsored web portal, The Learning Connection, providing a platform for connecting with and learning from experienced teachers. In February, 2010, the Core Team of English teachers will attend a one-day training session with Dr. Jones and Dr. Tinnerman from ISU. This day will jump-start these teachers by giving them training and time to create Learning Connection lessons to be used with their students. These teachers will also create an online Learning Connection community so that they can continue to collaborate as they implement lessons with students.

By the end of this project, students of the Core Team teachers (all 7th-9th grade) will complete at least four lessons delivered via the Learning Connection. Teachers will demonstrate how to participate in online courses, conduct whole class instruction, and present culminating student projects using ceiling-mounted LCD projectors Students from both districts, using classroom sets of laptops and iTouch devices, will be collaborating and communicating with one another via the Learning Connection communities portal. Additional online tools, such as Skype, Google Docs, and shared research tools will allow students to collaborate on projects that span districts -- much like a business with employees in their Atlanta office and their Chicago office working together on a joint project.

Through this project, all teachers will have opportunity to learn skills and develop practices that empower them to better integrate technology into their instruction. Research indicates teachers at the Awareness or Exploration levels do not continue to move forward due to lack of training on equipment use or how to use it as a teaching tool. To move teachers along the continuum of implementation, we will offer bi-weekly, afterschool, tech trainings on the use of various supporting technologies such as digital cameras for student projects, using iTouch devices, using whiteboards, getting started with WIKI's, blogs, and other online collaboration tools, etc. Trainings will begin in March, 2010 and will be conducted by a retired technology teacher respected for her ability to work with teachers at all levels. Training will conclude with ideas that teachers can begin using in their classrooms. As an incentive to begin using newly learned skills, attending teachers will be provided with immediate access to the technology being presented during that session. These teachers will be enrolled in a Learning Connection community where they can share how they integrated that week's technology.

As teachers feel ready, they will be able to attend a one-day intensive training session with Dr. Jones and Dr. Tinnerman from ISU. This session will be offered five times during our project. The session content is the same for each offering. The February, 2010 session will be reserved for the Core Teachers and the additional sessions, occurring every 3 months, will be available to 10 teachers per district per session. Over the course of this project, 33 teachers from each district will have had this intense PD opportunity and will have Learning Connection coursework available for our students. Students of these 33 teachers will actively be using tools such as blogging, collaborative documents, Photo Sharing, podcasting, Wikis, and video conferencing in developmentally appropriate learning opportunities.

PROFESSIONAL DEVELOPMENT

Too often, technology is underutilized as a means toward increasing student engagement due to teacher apprehension caused by lack of training and support. SOCS and RBB are extremely committed to providing continuous PD opportunities that support and expand the integration of technology in the classroom. The SOCS and RBB Curr. Directors are primarily responsible for the implementation and success of this project. They will work collectively with the facilitators listed below to ensure that PD remains focused on increasing student engagement through the use of technology and developing an embedded online PLC.

All teachers will have the opportunity to learn how to effectively use digital tools and resources to provide instruction, promote higher order thinking, increase student engagement, and authentically assess students in their classroom. Teachers will take the LoTi survey as a baseline for goal setting and again to measure their growth at the end of the project. All teachers will be enrolled in The Learning Connection, will be offered training in online PLCs and will have the opportunity to attend bi-weekly trainings covering topic specific technology integration.

The professional development plan has been divided by target audience and has been differentiated to support teachers at all LoTi. Each participant group includes a description, facilitator and LoTi targeted.

2/10

Core Team Teachers-11 Secondary English Teachers from both corporations who will become the model online PLC group for Cohort I, II and III.

-LoTi: 2-4b

-Facil: Dr. Mark Jones, Dr. Larry Tinnerman-Prof. of Curric, Instr., and Media Tech. at ISU

-Descrip: One day training to begin creating Learning Connection classes and lessons to be used in cross-district collaborative communities working on common projects.

All Teachers

-LoTi: 0-6

-Facil: Admin.

-Descrip: Teachers learn about LoTi, complete baseline survey and set personal goal for what level they would like to be at by the end of this project.

All Teachers (excluding core team)

-LoTi: 0-6

-Facil: Admin.

-Descrip: Training on the DOE-sponsored web portal, The Learning Connection, preparing a platform for online PLCs throughout this project.

3/10-9/11

All Teachers & Admin.

-LoTi: 0-4b

-Facil: Carolyn Livingston

-Descrip: Biweekly hour long trainings on the use of various supporting technologies focused on increasing student engagement. Participants will be provided with immediate access to the technology being presented during that session. Follow-up collaboration takes place in a Learning Connection community. Topics include: Lab management, Network basics, Web 2.0:The Learning Connection, Wikis, GoogleDocs, Skype, RSS; Podcasting, Images, Browser basics, websites, online temp., Windows, MS Office, E-mail basics; Hardware:Scanners, iPods, PDAs, Smartboards, Wireless, Drives, LCD proj., Dig. cam., Document Cameras

All Teachers

-LoTi: 2-6

-Facil: Jones & Tinnerman

-Descrip: Online PLC for teachers and students is developed utilizing The Learning Connection. Focus is placed on collaboration of teachers and collaborative student projects between classrooms and corporations.

4/10 & 9/10

Core Team & Admin.

-LoTi: 2-6

-Facil: Jones & Tinnerman

Descrip: Full day meeting to coordinate lessons and activities involving multiple classrooms. Joint curriculum further developed and modes of collaborative technology prepared.

5/10-Cohort I

9/10-II

1/11-III

Teachers (20 per cohort)

-LoTi: 2-6

-Facil: Jones & Tinnerman

-Descrip: 10 teachers from each corp. form a Cohort, attend a full day training & join The Learning Connection PLC. This hands-on training covers skills development and classroom implementation strategies to increase student engagement focusing on Web 2.0 tools, The Learning Connection & technology integration.

9/11

All Teachers

-LoTi: 0-6

-Facil: Tech. Dept.

-Descrip: Teachers complete the LoTi outcome survey & assess their growth.

FORMATIVE/SUMMATIVE EVALUATION

Throughout our project teachers will learn new practices, implement those practices, and share results continually. This constant formative evaluation process, and adjustments made based on the results, will ensure continuous program improvement. Formative evaluation instruments used to collect data will include online collaborative conversations , in-class discussions with students, teacher and student surveys, review of student work, and teacher observation of student engagement. Additional formative evaluative data will be collected by school administrators using the LoTi Observer. Administrators, using LoTi on a handheld iTouch, will record classroom walkthrough observations looking for indicators of LoTi classroom behaviors (higher order thinking, engage learning, authenticity, technology use). These observations are recorded and calculated to quickly determine a teachers LoTi level of technology integration. This continuous and immediate feedback to teachers will be valuable in moving them along the continuum of technology integration. As formative assessment data is collected it will be reviewed during quarterly leadership team meetings. Adjustments to the project, including additional professional development, additional equipment availability, and additional collaboration opportunities will be made accordingly.

Due to the short grant timeline, the objectives of our project are primarily process objectives. We will collect evidences of these objectives being accomplished thru observation, student participation logs, Learning Connection logs, sign-in sheets, LoTi survey results, and student reflective blogs. The true summative impact of this project on important indicators such as improved performance on ISTEP and End of Course Assessments, will not be fully realized by the end of this short grant timeline. As 9th grade students move up through high school and additional teachers learn to integrate technology to create engaging classrooms, student achievement on ISTEP and Core 40 assessments will improve. We will track participating students through our student information database watching trend data including discipline, attendance, grades, ISTEP scores, and Core 40 results. Improvements in instructional practices and technology integration will be evidenced via the LoTi Survey comparing pre-test levels with post-test levels.

LOCAL MATCH

$51,406

Both districts are committed to supporting this project by aligning resources (time, equipment, other funding) such that teachers are able to integrate technology into daily lessons to better engage students and increase student achievement. To successfully integrate Web 2.0 tools and The Learning Connection as outlined in this project a solid network infrastructure, stable Internet connections, adequate bandwidth and access to safe online content is imperative. District funding to directly ensure this project's success include but are not limited to the following:

WAN Support Tower upgrade (improve/stabilize Internet access to SOCS buildings) $5500

Purchase of classroom ceiling mounted projectors to support this project. (SOCS) $27,343

Purchase of classroom ceiling mounted projectors (RBB) $10,000

Upgrade of Internet connection to 10M (RBB) (add'l $500/month x 12 months) $6000

USB Drives - Professional Development Incentives (RBB) (30 x 24) $720

Network Printer for laptop carts (RBB) $598

Networkable Scanners (RBB) $1245

PARTNERSHIPS

Spencer-Owen Community Schools (SOCS) will partner with Richland-Bean Blossom Community Schools (RBB) for their experience in and enthusiasm for continued development of coursework via online content management systems. The two districts currently have a good working relationship among administrators, teachers and technology staff yet, although only 10 miles apart, we have had little opportunity to work together. Both districts are working toward increasing student achievement and raising ISTEP scores specifically in the area of reading and writing. RBB made a district committment to using Web 2.0 tools and online curriculum delivery with Moodle when two high school Social Studies teachers, with the support of the Principal, Director of Curriculum, Technology Director, and Superintendent, chose to completely deliver their curriculum using laptops and Moodle rather than textbooks. These teachers now have 5 months experience with Moodle and have built their entire curriculum, with daily lessons, online. The expertise of these teachers will serve as a resource to assist teachers at SOCS and additional teachers at RBB to begin using online technologies in their instruction.

Our districts have agreed that the primary focus of our project will be on all Freshman English students and their teachers. This provides us with common ground upon which to conduct our project and share experiences. The Core teachers from both districts will attend trainings together, create Learning Connection lessons together, and share experiences thru the online communities. Students, participating in similar coursework, will be able to use technology tools including laptops and iTouch devices to collaborate and communicate with students in other districts in ways that more closely emmulate what they will experience as they move on to secondary education or the workplace.

We are also looking to create collaborative Professional Learning Communities that include other districts that are experienced in delivering online instruction. Eastern Greene Schools and Monroe County Community Schools' Cadre 2 proposal focused on using Moodle, an online course management

software, with high school students. These teachers will be able to share their expertise in using this new instructional platform specifically in the area of high school English. Planning discussions have already begun with Eastern Greene Schools about the potential for their Cadre 2 project and ours to eventually evolve into an online PLC involving all of our districts. We are all very excited about this avenue for professional development and the timing of Indiana's release of The Learning Connection makes this an especially appealing direction.

Partnering with Dr. Mark Jones and Dr. Larry Tinnerman, Professors of Curriculum, Instruction, and Media Technology at Indiana State University, ensures that we will have consistent and experienced guidance in creating online lessons for students and a digital professional development network for teachers via The Learning Connection.

The Leadership Team will model our belief in the importance of Web 2.0 and 21st century skills by actively participating in all online collaboration. This grant proposal, in fact, has been written by representatives from SOCS and RBBCSC using the collaborative online services offered by Google Docs. In addition, we will use Skype for quick one-on-one meetings and will formally meet face-to-face each quarter to discuss our progress and to make mid-course adjustments.